

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1-13. (Canceled)

14. (Currently Amended) A method of treating ischemic tissues, comprising administering activated Factor XIII and thereby stimulating the perfusion of the ischemic tissues by inducing the proliferation of new blood vessels in the ischemic tissues.

15. (Canceled)

16. (Previously Presented) The method of claim 14, wherein the Factor XIII is activated in vitro or in vivo.

17. (Currently Amended) The method of claim 14 [[16]], wherein the Factor XIII is administered by topical application or injection.

18-19. (Canceled)

20. (Currently Amended) The method of claim 14 [[17]], wherein the Factor XIII is administered to treat a myocardial infarction.

21. (Canceled)

22. (Currently Amended) The method of claim 14 [[17]], wherein the Factor XIII is administered to treat an ischemic stroke or transient ischemic attack.

23. (Canceled)

24. (Currently Amended) The method of claim 14 [[17]], wherein the Factor XIII is administered to treat vascular or veno-occlusive diseases or obstructions of the microcirculation.